Cognitive Status

Diagnosis of dementia or delirium

Six Item Screener

Read to the patient:	
"I have a few questions I would like to ask you. First, I am going to name three objects. After I have said all three objects please repeat the objects. HAT…CAR…TREE" **(Allow one second to say each word. Say each object until they get each object correct.)** Please remember these objects because I am going to ask you to repeat them again in a minute.	
Read each question below to the patient. Score one point for each correct response.	
What year is this?	
What month is this?	
What day of the week is this?	
Read to the patient:	
What were the three objects I asked you to remember?	
HAT	
CAR	
TREE	
Total score	____/6

Scores less than 4 require a family caregiver to be witness to any consent forms, provide additional key informant data as patient may not be able to provide an accurate self history.

Confusion Assessment Method

TRY THIS: Confusion Assessment Method (CAM)
By Christine M. Waszynski RN, C, MS, APRN

WHY: Approximately 15 - 60 % of elderly patients experience a delirium prior to or during a hospitalization but the diagnosis is missed in up to 70% of cases. Delirium is associated with poor outcomes such as prolonged hospitalization, functional decline, and increased use of chemical and physical restraints. Delirium increases the risk of nursing home admission. Individuals at high risk for delirium should be assessed daily using a standardized tool to facilitate prompt identification and management. Risk factors for delirium include older age, prior cognitive impairment, presence of infection, severe illness or multiple co-morbidities, dehydration, psychotropic medication use, alcoholism, vision impairment and fractures.

BEST TOOL: The Confusion Assessment Method (CAM) includes two parts. Part one is an assessment instrument that screens for overall cognitive impairment. Part two includes only those four features that were found to have the greatest ability to distinguish delirium or reversible confusion from other types of cognitive impairment.

VALIDITY/RELIABILITY: Concurrent validation with psychiatric diagnosis revealed sensitivity of 94-100% and specificity of 90-95%. The CAM significantly correlated with the Mini-Mental Status Examination, the Visual Analog Scale for Confusion and the digit span test.

STRENGTHS AND LIMITATIONS: The tool can be administered in less than 5 minutes. It closely correlates with DSM-IV criteria for delirium. There is a false positive rate of 10% and the instrument has not been widely tested as a bedside tool for nurse raters. The tool identifies the presence or absence of delirium but does not assess the severity of the condition, making it less useful to detect clinical improvement or deterioration.

FOLLOW-UP: The presence of delirium as indicated by the algorithm, warrants prompt intervention to identify and treat underlying causes and provide supportive care. Vigilant efforts need to continue across the healthcare continuum to preserve and restore baseline mental status.

MORE ON THE TOPIC:

Chan, D. & Brennan, N. (1999). Delirium: Making the diagnosis, improving the prognosis. Geriatrics, 54(3), 28-42.

Inouye, S., van Dyck, C., Alessi, C., Balkin, S., Siegal, A. & Horwitz, R. (1990). Clarifying confusion: the confusion assessment method. Annals of Internal Medicine, 113(12), 941-948.

Rapp, C., Wakefield, B., Kundrat, M., Mentes, J., Tripp-Reimer, T., Culp, K., Mobily, P., Akins, J. & Onega, L. (2000).

Acute confusion assessment instruments: clinical versus research usability. Applied Nursing Research, 13(1), 37-45.

Segatore, M. & Adams, D. (2001). Managing delirium and agitation in elderly hospitalized orthopedic patients: Part 1 – Theoretical aspects. Orthopaedic Nursing, 20(1), 31-45.

The Confusion Assessment Method Instrument (from TRY THIS):

1. [Acute Onset] Is there evidence of an acute change in mental status from the patient's baseline?

2A. [Inattention] Did the patient have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said?

2B. (If present or abnormal) Did this behavior fluctuate during the interview, that is, tend to come and go or increase and decrease in severity?

3. [Disorganized thinking] Was the patient's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

4. [Altered level of consciousness] . Overall, how would you rate this patient's level of consciousness? (Alert [normal]; Vigilant [hyperalert, overly sensitive to environmental stimuli, startled very easily], Lethargic [drowsy, easily aroused]; Stupor [difficult to arouse]; Coma; [unarousable]; Uncertain)

5. [Disorientation] Was the patient disoriented at any time during the interview, such as thinking that he or she was somewhere other than the hospital, using the wrong bed, or misjudging the time of day?

6. [Memory impairment] Did the patient demonstrate any memory problems during the interview, such as inability to remember events in the hospital or difficulty remembering instructions?

7. [Perceptual disturbances] Did the patient have any evidence of perceptual disturbances, for example, hallucinations, illusions or misinterpretations (such as thinking something was moving when it was not)?

8A. [Psychomotor agitation] At any time during the interview did the patient have an unusually increased level of motor activity such as restlessness, picking at bedclothes, tapping fingers or making frequent sudden changes of position?

8B. [Psychomotor retardation]. At any time during the interview did the patient have an unusually decreased level of motor activity such as sluggishness, staring into space, staying in one position for a long time or moving very slowly?

9. [Altered sleep-wake cycle]. Did the patient have evidence of disturbance of the sleep-wake cycle, such as excessive daytime sleepiness with insomnia at night?

The Confusion Assessment Method (CAM) Diagnostic Algorithm

Feature 1: Acute Onset and Fluctuating Course

This feature is usually obtained from a family member or nurse and is shown by positive responses to the following questions: Is there evidence of an acute change in mental status from the patient's baseline? Did the (abnormal)behavior fluctuate during the day, that is, tend to come and go, or increase and decrease in severity?

Feature 2:Inattention

This feature is shown by a positive response to the following question: Did the patient have difficulty focusing attention, for example, being easily distractible, or having difficulty keeping track of what was being said?

Feature 3: Disorganized thinking

This feature is shown by a positive response to the following question: Was the patient's thinking disorganized or incoherent, such as rambling or irrelevant conversation, unclear or illogical flow of ideas, or unpredictable switching from subject to subject?

Feature 4: Altered Level of consciousness

This feature is shown by any answer other than "alert" to the following question:

Overall, how would you rate this patient's level of consciousness? (alert [normal]), vigilant [hyperalert], lethargic [drowsy, easily aroused], stupor [difficult to arouse], or coma [unarousable])

The diagnosis of delirium by CAM requires the presence of features 1 and 2 **and** either 3 or 4.

Family Confusion Assessment Method (FAM-CAM)

	YES	NO	DON'T KNOW
1. During the past few days, have you noticed any changes in your friend or relative's thinking or concentration, such as being less attentive, appearing confused or disoriented (not knowing where he/she was), behaving inappropriately, or being extremely sleepy all day?			
2. Did he/she have difficulty focusing attention, for example, being easily distracted or having trouble keeping track of what you were saying at any time?			
3. Was his/her speech disorganized, incoherent, rambling, unclear, or illogical at any time?			
4. Did he/she seem excessively drowsy or sleepy during the daytime at any time?			
5. Was he/she disoriented, for example, thinking he/she was somewhere other than where he/she was, or misjudging the time of day at any time?			
6. Did he/she seem to see or hear things which weren't actually present, or seem to mistake what he/she saw or heard for something else at any time?			
7. Did he/she behave inappropriately, such as wandering, yelling out, or being combative or agitated at any time?			
8. Please tell us more about the changes you noticed in any of the behaviors from questions 1-7 above: *Please write down as much detail as possible*			

	All the time	Come and go	Don't know
9. Were these changes (questions 1-7) present all the time, or did they come and go from day to day?			

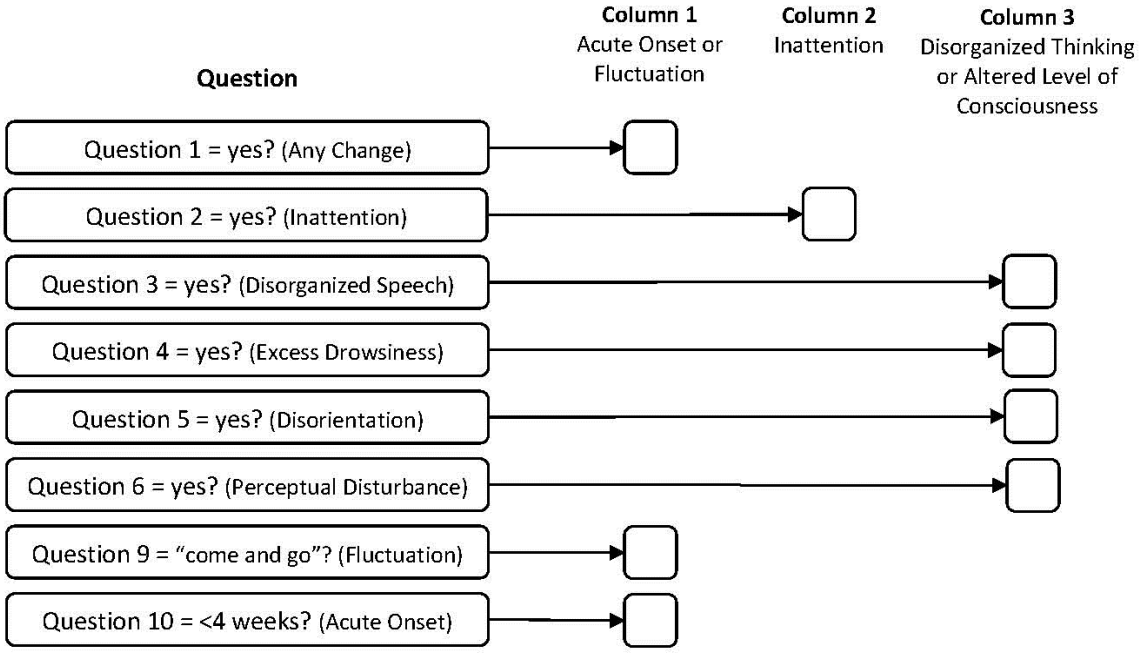
10. When did these changes first begin? Would you say they began:	☐ Within the last week ☐ Between 1 and 2 weeks ago ☐ Between 2 and 4 weeks ago ☐ More than 4 weeks ago
11. Overall, have these changes been getting better, worse, or staying about the same?	☐ getting better ☐ worse ☐ staying about the same

Scoring the FAM-CAM - *It is important to remember that the FAM-CAM is intended only to assist with screening and is not intended to provide a clinical diagnosis. If a positive score is suggested on the FAM-CAM, further evaluation with cognitive testing of the patient is necessary.*

The FAM-CAM is considered positive if the following features are present: a) acute onset or fluctuating course **and** b) inattention **and** c) either disorganized thinking or altered consciousness. Several of the questions may help to identify whether these features are present, as outlined below.

Feature	Question #	Positive Answer
Acute Onset -OR- Fluctuation	Question 1,10 Question 9	Yes, <4 weeks ago "Come and go"
-AND-		
Inattention	Question 2	Yes
-AND EITHER-		
Disorganized Thinking -OR- Altered Consciousness	Question 3,5,6 (7 supportive) Question 4	Yes Yes

Scoring Algorithm: Check the box if the respondent's answer is as indicated.
Delirium is suggested if there is **at least one check in each of the 3 columns.**



Delirium is suggested if there is **at least one check in each of the 3 columns.**
Delirium Suggested? _____ yes _____ no

See manual - http://www.hospitalelderlifeprogram.org/pdf/FAM-CAM%20Training%20Manual.pdf
The Family Confusion Assessment Method (FAM-CAM) Training Manual & Guide